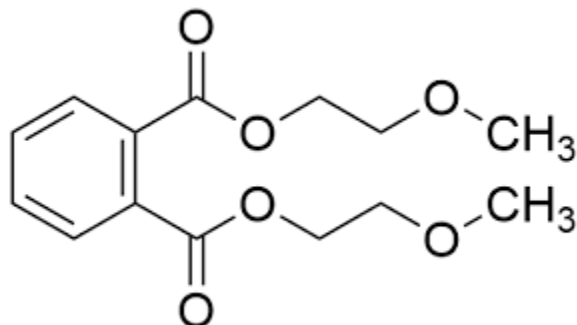


CAS 117-82-8

# Di(methoxyethyl) phthalate (DMEP)

C<sub>14</sub>H<sub>18</sub>O<sub>6</sub>



## Summary of Health Effects

DMEP can cause reproductive and developmental harm in animals and may harm humans. The European Union has banned DMEP in cosmetics and children's toys.

## How is DMEP used?

DMEP was detected as a plasticizer in a polyvinyl chloride (PVC) medical device and in personal care products collected from Shanghai markets.<sup>1,2</sup> DMEP has been detected in PVC children's toys and articles<sup>3</sup> including play and exercise balls, hoppers, and inflatable water products in Australia and in T-shirts, diapers, and house carpets in Germany.<sup>4</sup>

## Toxicity: What are its health effects?

The European Union added DMEP to the Candidate List of Substances of Very High Concern (SVHC) due to reproductive toxicity and banned DMEP for use in cosmetics and accessible components of children's toys.<sup>5,6</sup> The

Globally Harmonized System for labelling classified DMEP as category 1B for reproductive toxicity and assigned the risk phrase "may damage fertility or the unborn child" and "suspected of damaging fertility."<sup>7</sup>

Animal studies reported reproductive and developmental harm in rodents fed DMEP or methoxyacetic acid (MAA), a metabolite of DMEP.<sup>4,8,9</sup>

## Exposure: How can a person come in contact with it?

A person can come in contact with DMEP by breathing in contaminated air or dust or by skin contact with contaminated house dust or consumer products.

DMEP has been detected in house dust in Germany.<sup>10</sup> A Hong-Kong biomonitoring study detected DMEP in blood plasma of the male population.<sup>11</sup>

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